

CLAIMS

What is being claimed is:

1. A structure comprising:
a light source; and
an optical waveguide to be illuminated by said light source from an edge of said optical waveguide, the optical waveguide comprising a plurality of adjacent areas for illumination of corresponding parts of a liquid crystal panel;
wherein each of said areas is provided with an independently controllable light source for illuminating substantially said area.
2. The structure according to claim 1, wherein the plurality of areas consists of a first area and a second area having a common edge.
3. The structure according to claim 2, wherein the light source of each area is provided at an edge opposite said common edge.
4. The structure according to claim 1, wherein at least one light source comprises an LED.
5. The structure according to claim 1, wherein at least one light source comprises a cathode fluorescent light source.
6. A liquid crystal display apparatus comprising:
a liquid crystal panel; and
a backlight comprising:
a light source; and
an optical waveguide to be illuminated by said light source from an edge of said optical waveguide, the optical waveguide comprising a plurality of adjacent areas for illumination of corresponding parts of a liquid crystal panel;
wherein each of said areas is provided with an independently controllable light source for illuminating substantially said area.
7. The liquid crystal display apparatus according to claim 6, further comprising:
first means for writing image data in the liquid crystal panel; and
second means for independently controlling an illumination of the areas of the backlight.
8. A method of operating a liquid crystal display apparatus, the liquid crystal display apparatus comprising a liquid crystal panel and a backlight, the backlight comprising a light source and an optical waveguide to be illuminated by said light source from an edge of

said optical waveguide, the optical waveguide comprising a plurality of adjacent areas for illumination of corresponding parts of a liquid crystal panel, wherein each of said areas is provided with an independently controllable light source for illuminating substantially said area, the optical waveguide comprises n areas, and the liquid crystal panel comprises n parts that correspond to said n areas of the backlight, n being greater than or equal to 2, the method comprising:

selecting one of the parts of the liquid crystal panel corresponding to one of the areas of the backlight;

writing image data in said part while said area is not illuminated and at least one of the remaining areas of the backlight is illuminated.

9. The method according to claim 8, wherein said selecting and said writing are repeated.

10. The method according to claim 8, wherein a backlight is selected having two areas of equal dimensions, and wherein the step of writing image data to one of the parts of the liquid crystal panel that corresponds to one of the areas requires a time T , such that during said step the other area of the backlight is illuminated during a time of between $0.8 \cdot T$ and T .